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April 22, 2005

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Art Unit: 1634

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Re:

U.S. Application No. 08/852,495

Inventors: Ruddy et al.

Title: POLYMORPHISMS IN THE REGION OF THE HUMAN HEMOCHROMATOSIS GENE

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Message:

Please see attached courtesy copy of a clean copy of amended Table I for U.S. Application No. 08/852,495. This is not for filing.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Ruddy et al.

Confirmation No.:

7064

P.002

Serial No .:

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Art Unit:

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Filed:

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Examiner: Goldberg, Jeanine

For:

POLYMORPHISMS IN THE

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8907-057-999

REGION OF THE HUMAN HEMOCHROMATOSIS GENE

TRANSMITTAL

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

As discussed by telephone with the Examiner Goldberg on April 21, 2005, in connection with the above-identified patent application, attached is a clean copy of amended Table I that incorporates the amendments filed April 26, 1999, and January 31, 2001, to the originally filed Table 1. As indicated in the amendments filed April 26, 1999, and January 31, 2001, the changes to originally filed Table 1 reflected in the amended table attached herewith correct typographical errors or formatting of the table and are not new matter.

The differences between the originally filed Table 1 and the attached amended Table 1 are (1) the addition of SEQ ID numbers to certain sequences; (2) that each of the five pages of original Table I were retitled as Table 1A, Table 1B, Table 1C, Table 1D or Table 1E with the phrase "Polymorphic Sites in the HH Region"; (3) the addition of "CA DEL" to replace "AC DEL" on Table 1A, column 2, row 3; and (4) the substitution in row 29 of Table 1A of base location "32534-32537" (in column 3) and difference "GTGT DEL" (in column 4) in place of "32556-32559" and "TGTG DEL," respectively.

Table 2 as originally filed was not amended.

Date: April 22, 2005

Respectfully submitted,

Roger C. Rich

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For Nikolaos C. George (Reg. No. 39,201)

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Table 1A. Polymorphic Sites in the HH Region

BASE LOCATION	DIFFERENCE	BASE LOCATION	DIFFERENCE
35-36	CA DEL	20463	C-A
841	T-C	20841	A-T
2662-2663	TT DEL	21059	A-T
3767	T-C	21117	A-G
3829	C-G	21837	A-C
4925-4928	TAAA DEL	22293	A-C
5691	C-T	22786	C-A
5839	T-C	23009	G-A
6011	G-A	24143	T-A
6047	C-G	26175	G-C
6231	G-A	26667	C-A
6643	ADFL	26994	T-C
6698	T-C	27838	G-T
7186	T-C	27861	TDEL
7273	G-A	28132	G-A
7545-7558	TCACACACCGATTGG DEL (SEQ ID NO:17)	29100	G-A
7672	G DEL	29454-29457	TTTT DEL
7933	T-C	29787	T-G
8746	T-G	29825	A-C
9115	G-A	30009	T-C
9823	G-A	30177	A-G
10027	G-A	30400	A-G
10214	C-T	31059	T-A
10828	A-G	31280	C-T
10918	C-G	31749	Ç-T
10955	A-G	32040	C-G
11524	C-A	32534-32537	GTGT DEL
11674	A-G	33017	T-G
11955	T-C	33026	T DEL
12173-12175	TTT DEL	34434	C-T
13304	G-A	35179	A-C
13455	G-A	35695	G-A
14416-14417	A INS	35702	G-A
14998	C-T	35983	A-G
15564	T-C	37411	A-G
15887	A-G	38526	C-T
15904-1 5919	CCAAACTGATCTTTGA DEL (SEQ ID NO:18)	40431	C-A
16019	T DEL	42054-42055	TT DEL
16211	A-T	43783-43784	TTTT INS
17461	A-G	45120	CDEL
19755	G-A	45567	A-C
19949	C-T	46601	A-T
20085	C-T	47255	C-G
20366-20367	A INS	· ·	

Table 1B. Polymorphic Sites in the HH Region

BASE LOCATION	DIFFERENCE	BASE LOCATION	DIFFERENCE
47758	C-A	64788	
47994	G-C	64962	A-G G-A
48440	G-A	65891	<u> </u>
48650	T-G	66675	C-T G-C
48680	A-G	67186-67187	ATT INS
50240	C-T	67746-67747	TT INS
50553	G-A	68259	T-C
50586	G-T	68836	T-C
51322	G-C	68976	C-G
51747	A-G	72508	T-G
52474	C-G	72688	C-G
52733	C-A	75323-75324	TINS
52875	G-A	75887	G-C
53631-53637	TTTTTT DEL	77519	T-C
53707	G-A	77749	G-A
54819	A-G	77908	T-C
55913	T-C	78385	C-G
56225	A-C	78592-78593	AG INS
56510	T-C	80189	T-G
56566	G-A	80279	T DEL
56618	A-T	80989-80990	AINS
57815	A-G	81193	T-C
58011	T DEL	81273	A DEL
58247-58248	TINS	82166	G-A
58926	C-G	83847	T DEL
59406	C-G	84161-84162	CA-GG
59422	G-C	84533	A-G
60221-60222	A INS	84638	T-G
60656-60657	CA DEL	85526	T-G
61162	G-A	85705	G-T
61465	G-A	86984	T-C
61607	A DEL	87655	T-Ç
61653	T-C	87713	A-C
61794-61795	TINS	87892	C-T
62061	G-C	88192	T DEL
62362	T-G	88528	A-G
62732	C-G	89645	A-T
53364	G-A	89728	A-G
53430-63431	GT INS	90088	T-C
53754	C-T	91193-91194	2209bp INS
63785	A-C	91373	T-C
53870-63871	A INS		

BASE LOCATION	DIFFERENCE	BASE LOCATION	DIFFERENCE
91433-91434	A INS		
91747	G-A	133572	A-C
93625	T DEL	134064	T-G
95116-95117		136999	G-A
96315	TINS	137784	C-T
97981	G-A A-G	138903	G-A
98351		1391 59-1 39160	A INS
99249	T DEL	140359	G-A
100094-1 00095	C-T	140898	C-T
	TINS	141313	C DEL
100647-100648	TTC INS	141343	T-C
100951	C-T	142148	T-C
101610	C-G	142178	C-A
102589	C-T	142433-1 42434	ATAGA INS
103076-1 03077	TATATATATATA INS (SEQ ID NO:19)	143783	C-T
103747	T-C	144090	C-T
105638	A-C	144220-144221	A INS
107024	C-T	144725	A-C
107322	С-Т	145732-145733	AAAAAAAAAAAAA INS (SEQ ID NO:20)
107858	C-G	147016-147017	CG DEL
109019	A DEL	147021	G-T
109579	T DEL	147536	T-G
110021	C-A	148936	T-A
111251	C-A	149061	T-C
111425	G-A	154341	A-T
112644	T-A	154588	G-A
13001	G-C	155464	G-A
113130	C-T	158574	C-G
14026	G-A	160007	C-T
14250	A DEL	164348	A-T
15217	C-G	164499	
17995	G-A	166677-166678	C-G
18874	A-G	† 	AAAG INS
119470	T-C	167389 168506-168507	G-A AGGATGGTCT INS (SEQ ID
19646	G-T	168515	NO:21)
.20853	C-T		T-C
21582	G-A	169413-169414 170300-170301	AA INS TTGTTGTTGTTG INS (SEQ
			ID NO:22)
23576	A-C	170491	G-A
25581	C-T	173428	T-C
25970	G-T	<u>17</u> 3642	G-A
	A-G	173948	T-G
	A DEL	175330	T-C
	G-C	175836	T-C
	A INS	176200	G-C
32569	C-T	176222	T-C

Table 1D. Polymorphic Sites in the HH Region

BASE LOCATION	DIFFERENCE	BASE LOCATION	DIFFERENCE
176524	A-T	102.400	
176684	G-A	193499	C-T
176815	T-C	193738	C-G
177049	T-C	193984-193985	ACACACAC INS
177065	G-T	194064	C-G
178285	T-C	194504	A DEL
178551-178552		194734	G-A
179114-179115	CTTTTTTTTTTTT INS (SEQ ID NO:23) A INS	194890	A-C
179260	C-G	195404	G-A
179281	C-G	195693	A-T
180023	G-C	196205	G-A
180430	T-C	197424	C-T
180773	T-C	197513	C-T
180824	T-C	197670	G-A
181097		198055	C-A
	C-T	198401	C-T
181183	A-T	198692	A-G
182351	C-T	198780	T DEL
183197	G-A	199030	T-G
183623	A-T	199933	C-T
183653	G-T	200027	G-A
183657	T-G	200439	T-A
183795-183796	A INS	200452	A-G
184060	G-A	200472-200483	AATAATAATAAT DEL (SEQ ID NO:24)
184993	G-A	200559	A-T
185918	A-G	200745	A-G
186036	T-C	200919	T-A
186506-186507	TAAC INS	201816	C-T
186561-186568	TATTTATT DEL	201861-201862	42bp INS
186690	G DEL	202662	T-C
186751	T-A	202880	T-C
187221	A-G	204341	C-T
187260	A-G	204768	A-T
187444-187447	CTCT DEL	205284	T-G
187831-187832	CINS	207400	C-A
188638	G-A	208634	T-C
188642	C-T	208718	TDEL
189246	T-C	208862	A-C
190340	A-C	209419-209420	TT DEL
190354	A-G	209802	G-A
190762	A-G	209944	C-G
191260	G-T	210299	A-G
193018-193019	AGAT INS	211142	G-A
	T-G	212072	G-A
193196-193197	C INS	212146	T-C

Table 1E. Polymorphic Sites in the HH Region

BASE LOCATION	DIFFERENCE	BASE LOCATION	DIFFERENCE
212379	G-A	271006	
212637-212639	TCTDEL	231226	A-G
212696		231447	G-A
213042	T-C	231835	A-G
214192	Т-А	232400-232402	AAA DEL
	A-G	232402-232403	G INS
214529-214530	TTTTTTTTTT INS	232515	G-C
214549	T-C	232703	G-T
214795	C-T	232750	A-G
214908	T-G		
214977	A-G		
215769	C-T		
215947	C-A		
216232	A-G		
217478	G-A		
219052	T-C		
219082-219083	ATATATATATATATAT INS		
219314	C-A		
219327	G-A		
219560	C-T		
219660	C-T		
219889	G-A		
220198	G-T		
220384	G-A		***
220451-220452	CAAAAA INS		
221363	G-A		
221645	G-A		
222119	T-C		
222358	A-G		
222367	A-C		
222686	A-G		
222959	T-C		
223270-223271	TT DEL		
223283	T-C		
224964	T-C		
25232	A-C		
25366-225367	TTTT INS		
	G-C		
<u>254</u> 86	T-C		
	A-G		
28421	A-G		···
30047	G-A		
30109	G-C		
	C-G		· · · · · · · · · · · · · · · · · · ·
30394	A-C	· · · · · · · · · · · · · · · · · · ·	